

The opinion in support of the decision being entered today was not written for publication and is not binding precedent of the Board.

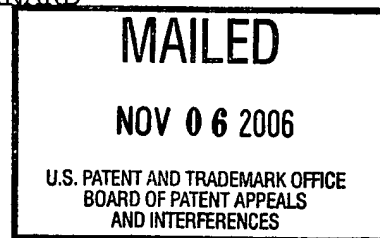
UNITED STATES PATENT AND TRADEMARK OFFICE

BEFORE THE BOARD OF PATENT APPEALS
AND INTERFERENCES

Ex parte DURIEZ GILBERT and DEWIMILLE BERNARD

Appeal No. 2006-2629
Application No. 09/887,066
Technology Center 1700

HEARD: October 17, 2006



Before OWENS, WALTZ and GAUDETTE, *Administrative Patent Judges*.
OWENS, *Administrative Patent Judge*.

DECISION ON APPEAL

This appeal is from a rejection of claims 9-23, which are all of the pending claims.

THE INVENTION

The appellants claim an apparatus and method for analyzing and/or measuring gaseous constituents in drilling fluids.

Claim 9 is illustrative:

An analysis and/or measuring device comprising means for extracting, in the gaseous form, hydrocarbons contained in a liquid drilling fluid after drilling in a reservoir rock, means for transporting said extracted gases, and means intended for analysis and measurement on these extracted gases, characterized in that said transport means include a tubular line comprising an inner tube which limits retention of trace hydrocarbons made from at least one plastic selected from the group consisting of PTFE (polytetrafluoroethylene), FEP (tetrafluoroethene-

perfluoroprene copolymer), PVDF (polyvinylidene fluoride), ETFE (tetrafluoroethylene-ethylene copolymer), ETFCE (ethylenetrifluoroethylene copolymer), PCTFE (polychlorotrifluoroethylene), FPA (perfluoroalkoxyalkane), hexafluoropropylene/vinylidene fluoride copolymers, hexafluoropropylene/vinylidene fluoride/tetrafluoropropylene THV terpolymers, tetrafluoroethylene/hexafluoropropylene/treated vinylidene fluoride, PEEK (polyetherether ketone), PEKK, PAEK, PEK, and aliphatic polyketones.

THE REFERENCES

Issenmann	5,090,256	Feb. 25, 1992
Cheney et al. (Cheney)	5,566,720	Oct. 22, 1996

THE REJECTION

Claims 9-23 stand rejected under 35 U.S.C. § 103 as being unpatentable over Issenmann in view of Cheney.

OPINION

We reverse the aforementioned rejection. We need to address only the independent claims, i.e., claims 9 and 16, each of which requires an inner tube that is made of at least one recited polymer that limits retention of trace hydrocarbons.

Issenmann discloses a method and apparatus for sampling gases contained in drilling mud from an oil well or oil exploration site (col. 1, lines 10-13). The apparatus is placed as close to the source of drilling mud as possible to prevent escape of gases therefrom so that the properties of the sampled hydrocarbon gases correspond as closely as possible to the

properties at the source (col. 4, lines 39-52). The drilling mud is collected and delivered to a degassing device (23) through, respectively, flexible tubes 28 and 22, the compositions of which are not disclosed (col. 5, lines 47-55).

Cheney discloses a dual layer hose that has a fluoropolymer inner layer and is useful as a fuel line or a vapor recovery line in a motor vehicle (col. 1, lines 9-11). The preferred fluoropolymer is made of vinylidene fluoride, hexafluoropropene and tetrafluoroethylene (col. 5, lines 49-52). Cheney teaches that it is important that fuel and vapor return lines be essentially impervious to permeation of hydrocarbons (col. 1, lines 25-28).

The examiner argues that "[i]t would have been obvious to one having an ordinary skill in the art at the time of the invention to modify Issenmann to include the elongated fuel and vapor tube of Cheney because of the increased retention time of the hydrocarbons in the tubing during the transporting to the analyzer or the measurement means and to limit retention of trace hydrocarbons so that the samples can be analyzed in there [sic] purest form when transported from the degassing apparatus" (answer, page 5). For a disclosure of limiting retention time of hydrocarbons the examiner relies upon Cheney's column 1, lines

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25-30, column 3, lines 11-22, and column 4, lines 30-32 and 39-44 (answer, pages 6-7).

Cheney's column 1, lines 25-30 and column 3, lines 11-22 disclose that it is important to reduce hydrocarbon emissions from fuel and vapor return lines by making the lines impervious to permeation of hydrocarbons. Column 4, lines 30-32 states that "in a [sic] application such as fuel lines and vapor recovery systems, outer diameters up to about 2 inches are preferred." Column 4, lines 39-44 discloses that wall thicknesses between about 0.8 and about 1 mm exhibit better durability, stability and resistance to hydrocarbon permeation than conventional polymeric fuel and vapor tubes.

Thus, none of the portions of Cheney relied upon by the examiner pertains to limiting retention of trace hydrocarbons. The examiner's reason for combining Issenmann and Cheney, therefore, is improper. Moreover, the examiner has not established that the reduced permeation disclosed by Cheney would have been desired in Issenmann's lines by one of ordinary skill in the art.

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For the above reasons we conclude that the examiner has not carried the burden of establishing a prima facie case of obviousness of the appellants' claimed invention.

DECISION

The rejection of claims 9-23 under 35 U.S.C. § 103 over Issenmann in view of Cheney is reversed.

REVERSED

Terry J. Owens)
TERRY J. OWENS)
Administrative Patent Judge)

THOMAS A. WALTZ
Administrative Patent Judge

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Linda M. Gaulette
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